Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A network connection apparatus for operating a plurality of network connection apparatuses connected to a local area network virtually as one network connection apparatus, the network connection apparatus comprising:

a state monitor section for managing an operating state as ~~a network~~ the network connection apparatus;

a message processing section for performing an exchange process of an advertisement message representative of the operating state during operation as ~~a network~~ the network connection apparatus;

a priority comparing section for acquiring priority information representative of a priority to operate as ~~a network~~ the network connection apparatus from the advertisement message received, and comparing same with priority information possessed; and

a master transition timer section for counting for a timing of transition of from a standby state into ~~an operating~~ the operating state as ~~a network~~ the network connection apparatus;

whereby, when the state monitor section decides that the network connection apparatus is not in ~~an operating~~ the operating state, the priority comparing section commences a process for arbitration between the network connection apparatuses in the standby state to transit to ~~an operating~~ the operating state by use of ~~the master~~ a master transition timer at a time deciding that the priority possessed is higher than the priority information ~~of within~~ within the advertisement message received.

2. (Currently Amended) A network connection apparatus for operating a plurality of network connection apparatuses connected to a local area network virtually as one network connection apparatus, the network connection apparatus comprising:

a state monitor section for managing an operating state as ~~a network~~ the network connection apparatus;

a message processing section for performing an exchange process of an advertisement message representative of the operating state during operation as ~~a network~~ the network connection apparatus;

an advertisement timer for counting for a timing to send ~~the advertisement~~ an advertisement message at a regular interval;

a message timer section for counting a time to decide whether the advertisement message is received in a predetermined time from the network connection apparatus operating as ~~a network~~ the network connection apparatus; and

a priority comparing section for acquiring priority information representative of a priority to operate as ~~a network~~ the network connection apparatus from the advertisement message received, and comparing same with priority information possessed; and

a master transition timer section for counting ~~for a timing~~ a timing of transition ~~of from~~ from a standby state into ~~an operating~~ the operating state as ~~a network~~ the network connection apparatus;

whereby, when the state monitor section decides that the network connection apparatus is not in ~~an operating~~ the operating state, the priority comparing section, in a case of the decision that the priority possessed is higher than the priority information in the received advertisement message, compares between a remaining time of the message timer section and a skew time calculated based on the priority possessed, to set the skew time to the master transition timer section when the skew time is shorter, so that, when the master transition timer section goes into a time-up, the state monitor section instructs the message processing section to send ~~an~~

~~advertisement~~another advertisement message requesting for transition ~~of from~~ from the operating state into the standby state to the network connection apparatus ~~operating as a network connection apparatus~~.

3. (Currently Amended) A network connection apparatus according to claim 1, further comprising a link monitor section for evaluating a connectability with an external network, wherein in a case that the link monitor section decides the connectability as a predefined value or higher when the master transition timer section goes ~~into a~~ into the time-up, the state monitor section sends ~~an advertisement~~ the other advertisement message instructing for transition from the operating state into the standby state to the network connection apparatus ~~operating as a network connection apparatus~~.

4. (Currently Amended) A network connection apparatus according to claim 1, further comprising a link monitor section for evaluating a connectability with an external network, wherein in a case that the state monitor section decides operating as ~~a network~~ the network connection apparatus and the link monitor section decides the connectability lower than a predefined value, the state monitor section instructs the message processing section to send another advertisement message representative of ~~an operating~~ the operating state as ~~a network~~ the network connection apparatus to the network connection apparatus on a same local area network.

5. (Currently Amended) A network connection apparatus according to claim 1, further comprising a link monitor section for evaluating a connectability with an external network, wherein in a case the state monitor section decides operating as ~~a network~~ the network connection apparatus and the link monitor section decides the connectability lower than a predefined value, the state monitor section instructs the message processing section to send another advertisement message requesting for a transition from the standby state into the operating state to the network connection apparatus on a same local area network.

6. (Currently Amended) A network connection apparatus according to claim 1, wherein ~~the transition~~a transition request from the operating state into the standby state by the state monitor section is the advertisement message set with ~~a~~

~~possessed~~ the possessed priority at a highest, and the master transition timer section is set with a skew time based on the priority set.

7. (Currently Amended) A network connection apparatus according to claim 4, wherein the advertisement message representative of the operating state, in a case that the state monitor section decides operating as ~~a network~~ the network connection apparatus and the link monitor section decides the connectability lower than ~~a predefined~~ the predefined value, is set with a priority at a lowest.

8. (Currently Amended) A network connection switching method comprising:

a state monitoring step of deciding whether a plurality of network connection apparatuses connected to a local area network are in an operating state or in a standby state as a network connection apparatus to operate virtually as one network connection apparatus;

a step of receiving an advertisement message from a second network connection apparatus in the operating state as a network connection apparatus by a first network connection apparatus decided as the standby state in the decision; and

a priority comparing step of comparing between priority information, in the advertisement message, representative of a priority to operate as ~~a network~~the network connection apparatus and priority information possessed;

whereby an arbitration process is commenced ~~at between~~ between the network connection apparatuses in the standby state to transit to the operating state at a time that the priority possessed is decided higher in the priority comparing step.

9. (Currently Amended) A network connection switching method comprising:

a state monitoring step of deciding whether a plurality of network connection apparatuses connected to a local area network are in an operating state or in a standby state as a network connection apparatus to operate virtually as one network connection apparatus;

a step of receiving an advertisement message from a second operating network connection apparatus in an operating step as a network connection apparatus by a first network connection apparatus decided as the standby state in the decision;

a step of counting a master down time for a decision as to whether the advertisement message is to be received in a predetermined time from the second network apparatus;

a step of notifying of a transition to the operating state from the first network apparatus to the second network apparatus when the master down time expires;

a priority comparing step of comparing between priority information, in the advertisement message, representative of a priority to operate as ~~a network~~ the network connection apparatus and priority information possessed; and

a step of comparing between a remaining time of the master down time and a skew time calculated shorter in time as the priority possessed is higher when the priority possessed is higher in the priority comparing step, and replacing the master down time with the skew time when the skew time is shorter.

10. (Currently Amended) A network connection switching method according to claim 9, further comprising a step of detecting whether a connectability with an external network is equal to or greater than a predefined value or not, and a step of permitting the notification, of a transition to the operating state, from the first network apparatus to the second network apparatus only when the connectability is equal to or greater than the predefined value in the detection at the first network connection apparatus.

11. (Currently Amended) A network connection switching method according to claim 10, further comprising a transition request step for the second network connection apparatus to request the first network connection apparatus to transit to the operating state when the connectability of the second network connection apparatus is not equal to or greater than the predefined value.

12. (Currently Amended) A network connection switching method according to claim 9, further comprising a step of temporarily setting the priority possessed at a highest when the priority possessed is higher in the priority comparing step at the first network connection apparatus, to notify the priority information possessed from the first network connection apparatus to the second network connection apparatus and other standby network connection apparatus in the step of ~~a notification~~ notifying of the transition to the operating state.

13. (Original) A network connection switching method according to claim 11, wherein, in the transition request step, the second network connection apparatus makes a notification with the priority possessed rendered a lowest.

14. (Currently Amended) A network connection switching method according to claim 12, wherein the priority possessed is returned to a value immediately preceding to a setting at a highest after a transition of the first network connection apparatus from standby state into the operating state.

15. (Original) A network connection switching method according to claim 11, further comprising a step of replacing the master down time with the skew time at a time that the first network connection apparatus receives the transition request from the second network connection apparatus.

16. (Currently Amended) A network connection apparatus according to claim 2, further comprising a link monitor section for evaluating a connectability with an external network, wherein in a case that the link monitor section decides the connectability as a predefined value or higher when the master transition timer section goes into a time-up, the state monitor section sends another advertisement message instructing for transition from the operating state into the standby state to the network connection apparatus operating as ~~a network~~ the network connection apparatus.

17. (Currently Amended) A network connection apparatus according to claim 2, further comprising a link monitor section for evaluating a connectability with an external network, wherein in a case that the state monitor section decides operating as ~~a network~~ the network connection apparatus and the link monitor

section decides the connectability lower than a predefined value, the state monitor section instructs the message processing section to send another advertisement message representative of ~~an operating~~ the operating state as ~~a network~~ the network connection apparatus to the network connection apparatus on a same local area network.

18. (Currently Amended) A network connection apparatus according to claim 2, further comprising a link monitor section for evaluating a connectability with an external network, wherein in a case that the state monitor section decides operating as a network connection apparatus and the link monitor section decides the connectability lower than a predefined value, the state monitor section instructs the message processing section to send another advertisement message requesting for a transition from the standby state into the operating state to the network connection apparatus on a same local area network.

19. (Currently Amended) A network connection apparatus according to claim 2, wherein ~~the transition~~a transition request from the operating state into the standby state by the state monitor section is the advertisement message set with ~~a possessed~~ the possessed priority at a highest, and the master transition timer section is set with a skew time based on the priority set.

20. (Currently Amended) A network connection apparatus according to claim 3, wherein ~~the transition~~ a transition request from the operating state into the standby state by the state monitor section is the other advertisement message set with ~~a possessed~~the possessed priority at a highest, and the master transition timer section is set with a skew time based on the priority set.

21. (Currently Amended) A network connection apparatus according to claim 16, wherein ~~the transition~~a transition request from the operating state into the standby state by the state monitor section is the other advertisement message set with a possessed priority at a highest, and the master transition timer section is set with a skew time based on the priority set.

22. (Currently Amended) A network connection apparatus according to claim 17, wherein the other advertisement message representative of the operating

state, in a case that the state monitor section decides operating as ~~a network~~ the network connection apparatus and the link monitor section decides the connectability lower than a predefined value, is set with a priority at a lowest.

23. (Currently Amended) A network connection switching method according to claim 10, further comprising a step of temporarily setting the priority possessed at a highest when the priority possessed is higher in the priority comparing step at the first network connection apparatus, to notify the priority information possessed from the first network connection apparatus to the second network connection apparatus and other standby network connection apparatus in the step of ~~a notification of~~ notifying the transition to the operating state.

24. (Currently Amended) A network connection switching method according to claim 23, wherein the priority possessed is returned to a value immediately preceding to a setting at a highest after a transition of the first network connection apparatus from the standby state into the operating state.

25. (New) A network connection apparatus according to claim 1, further comprising a network device switching section for selecting between: (i) a first mode in which switching of the network connection apparatus to the operational state is based on relative priorities in the advertisement message and that possessed by the network connection apparatus, and (ii) a second mode in which switching of the network connection apparatus to the operational state is based on a shutdown of one of the other network connection apparatuses, currently acting as the network connection apparatus in the operating state.

26. (New) The network connection apparatus according to claim 1, wherein responsive to: (1) the priority associated with the priority information possessed being higher than the priority associated with the acquired priority information; and (2) the state monitor section determining that the network connection apparatus is not in the operating state, the priority comparing section commences the process for arbitration between the network connection apparatuses in the standby state for transition to the operating state such that respective ones of: (i) the network connection apparatus, and (ii) the plurality of other network connection apparatuses that are in the standby state and have the possessed priority

higher than the acquired priority, as candidate virtual network connection apparatuses, reduce the transition interval for transition from the standby state into the operating state, and the candidate virtual network connection apparatus having a highest priority has a shortest transition interval prior to sending a subsequent advertisement message.